

## CLAIMS

[1] An acrylic polymer emulsion containing a polymer formed by polymerizing 100 % by weight in total of a monomeric mixture comprising 50 to 90 % by weight of an alkyl acrylate or an alkyl methacrylate, 9 to 49 % by weight of a vinyl monomer of which homopolymer having a glass transition temperature  $T_g$  is not lower than 80°C, 0.2 to 10 % by weight of a vinyl monomer having a carboxyl group and 0.1 to 5 % by weight of a crosslinkable monomer having a molecular weight of not less than 280.

[2] An acrylic polymer emulsion containing a polymer formed by polymerizing 100 % by weight in total of a monomeric mixture comprising 60 to 80 % by weight of an alkyl acrylate or an alkyl methacrylate, 19 to 39 % by weight of a vinyl monomer of which homopolymer having a glass transition temperature  $T_g$  is not lower than 80°C, 0.5 to 5 % by weight of a vinyl monomer having a carboxyl group and 0.3 to 3 % by weight of a crosslinkable monomer having a molecular weight of not less than 280.

[3] An acrylic polymer emulsion containing a polymer formed by polymerizing 100 % by weight in total of a monomeric mixture comprising 70 to 75 % by weight of an alkyl acrylate or an alkyl methacrylate, 23 to 28 % by weight of a vinyl monomer of which homopolymer having a glass transition temperature  $T_g$  is not lower than 80°C, 1 to 3 % by weight of a vinyl monomer having a carboxyl group and 0.5 to 2.5 % by weight of a crosslinkable monomer having a molecular weight of not less than 280.

[4] The acrylic polymer emulsion according to any one of claims 1 to 3, wherein the alkyl acrylate or the alkyl methacrylate is an alkyl acrylate or an alkyl methacrylate containing an alkyl group having carbon atoms of not

less than 8.

[5] The acrylic polymer emulsion according to claim 4, wherein the alkyl acrylate or the alkyl methacrylate containing an alkyl group having carbon atoms of not less than 8 is at least one kind selected from 2-ethylhexyl acrylate, 2-ethylhexyl methacrylate, lauryl acrylate and lauryl methacrylate.

[6] The acrylic polymer emulsion according to any one of claims 1 to 5, wherein the vinyl monomer of which homopolymer having a glass transition temperature  $T_g$  is not lower than 80°C is at least one kind selected from acrylonitrile, styrene and methyl methacrylate

[7] The acrylic polymer emulsion according to any one of claims 1 to 6, wherein the vinyl monomer having a carboxyl group is acrylic acid.

[8] The acrylic polymer emulsion according to any one of claims 1 to 7, wherein the crosslinkable monomer having a molecular weight of not less than 280 is poly(tetramethyleneether) glycol diglycidyl ether.

[9] The acrylic polymer emulsion according to any one of claims 1 to 8, wherein the crosslinkable monomer having a molecular weight of not less than 280 is poly(tetramethyleneether) glycol diglycidyl ether and at least one kind selected from propylene glycol polybutylene glycol monoacrylate and 3-alkoxy-2-hydroxypropyl acrylate having an alkoxy group with carbon atoms of not less than 10.

[10] A glove obtained by molding by a method of immersing a mold of hand using the acrylic polymer emulsion defined by any one of claims 1 to 9.